Words

Definition

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Definition is the most common term from Aristotelian logic which survives in contemporary medical language. It is standard for doctors to expect a definition of any key word before entering into discussion. The nature of medical definition has been discussed in many articles by J G Scadding (1,2,3,4). But how much can definitions achieve? Are we defining words or things? Should definitions come at the beginning, or at the end? Are there words which are indefinable? Are definitions true or false? Are they tautologies? Can they settle disputes? These questions raise philosophical issues well beyond the scope of this article (5,6,7), but I shall try to provide some clarification of what it is reasonable to hope for from definitions, and touch only in passing on the wider philosophical issues.

Nominal definition

The Aristotelian tradition distinguishes 'nominal' and 'real' or 'essential' definitions. To bring out this distinction one must consider answers to questions which begin: 'What is ... ?' 'What does it mean to ...?' For example, 'What is "positive health"?' This question is asking for the definition of a term, a word or words; as such it is asking for a nominal definition. One way of identifying the request for a nominal definition is to consider whether what we are asking about (as in the example given) should be enclosed in inverted commas. If however, like jesting Pilate, we ask without quotes 'What is truth?' we are not asking about the meaning of a word, for we all know what the word 'truth' means, but about the nature of what the word refers to. And, of course, that nature is very complex, which is why Pilate did not wait for the answer. This second sort of inquiry is an inquiry into 'realist' or 'essentialist' definitions.

There are many methods of nominal definition. One method – beloved of writers of essays – is to look the word up in a dictionary. This method of definition is called 'lexical' because it is concerned only with words, or 'reportive' since it reports current usage of words in terms of their approximate synonyms. At some point, however, we must get outside the enclosure of words or we shall not really know what any word means; lexical, reportive or

'word-word' definitions presuppose the existence of 'word-thing' definitions.

A great deal of medical students' knowledge of their subject (too much in some people's opinion) consists of word-thing definitions. Students must know the names of bones, muscles and so forth, and the more advanced student must know what type of thing a term like 'compound fracture' refers to. Sometimes students are already familiar with the word, and the teacher's task is to link the word with the type of thing; at other times students are familiar with the thing and then learn the word, like the character in the play who learned to his surprise that he had been speaking prose all his life! In a third situation the word and the thing are learned as part of the same lesson, as when the professor describes a set of symptoms to the student and then gives the symptoms a name. 'These events are called a "myocardial infarction".' In a fourth type of situation, in a clinic, say, the professor may be in a position to point to an example of the disease or injury. It is the stuff of the traditional medical cartoon to depict the professor declaiming 'A truly magnificent example of the Schneidergruppelfarben syndrome' while the dismayed patient cowers in fright. But whatever the ethics of the situation the professor is engaging in the logically correct procedure or word-thing definition.

In the case just described it is possible for the professor, as I said, either to describe the syndrome or to point to an example of it. But there are types of situation where only the latter method is possible. This type of case is called 'ostensive' definition and its method is to explain the word by pointing to the thing. Obvious examples here are colour words. Of course, it is possible to say "Green" is the colour which has such and such a wave length! But this does not constitute a complete definition of 'green'. This point – that some words can be defined only ostensively – must be distinguished from a related question: are some words indefinable? I shall return to the latter question as part of my discussion of 'real' definition.

It is notorious that words in ordinary or indeed technical language are sometimes ambiguous, and one impetus behind the desire to define is to remove ambiguity. Definitions which select one from a range of meanings as the preferred meaning for a given purpose are called 'stipulative', and stipulations are essential for clear discussion. An excellent example of this is provided by William James. William James reported returning from a walk to find a group of friends debating about a squirrel clinging to the trunk of a tree. As someone walked around the tree, it seemed, the canny squirrel edged sideways around the trunk, always keeping it between himself and the moving person. James's friends were quite sure that the person went around the tree. What they couldn't seem to agree on was whether the person went round the squirrel. Here is how James dealt with the question:

'Which party is right,' I said, 'depends on what you practically mean by "going around" the squirrel. If you mean passing from the north of him to the east, then to the south, then to the west, and then to the north of him again, obviously the man does go around him, for he occupies these successive positions. But if on the contrary you mean being first in front of him, then on the right of him, then behind him, then on his left, and finally in front again, it is quite as obvious that the man fails to go round him, for by the compensating movements the squirrel makes, he keeps his belly turned towards the man all the time, and his back turned away. Make the distinction, and there is no occasion for any further dispute' (8).

One disguised form of stipulative definition may be called 'persuasive definition'. For example, the word 'courage' has favourable resonances. Suppose that a teacher of small boys wishes to broaden their moral outlook so she says that true courage was shown by those who did not go off to fight but protested against the futility of war. In this way she has used the emotive force of 'courage' to bolster up a form of behaviour which her young pupils might not have thought to be typical of courageous behaviour. Again, a word such as 'cultured' means 'conversant with and appreciative of the arts'. Suppose a medical professor in a lecture tells his students that ethics and the arts are unnecessary in medical courses because medicine too is a form of culture. This would be the practice of persuasive definition, because the favourable connotations of the word are being applied to new criteria.

My claim that a nominal definition can be achieved by a description of the type of thing the word refers to, or by pointing out an example of the thing, may encourage the view that definition is relevant only for nouns. But not only does this ignore the complex nature of language, it also misleads even about the process of defining nouns. To bring out this point consider how you would define words such as 'or' and 'damn!' The point is that language is not just indicative, as when nouns denote things, but is

also expressive, as when we use expletives, and syntactical, as when we use word-order, or linking words, to convey our meaning. Definitions of syntactical words must involve rules for use, and even expressive words such as 'damn!', or parenthetical expressions, or qualifying expressions, require rules for their use and cannot be defined by a description or by pointing. So much is reasonably obvious when it is stated. It is less obvious, but of central importance, that rules for use are explicitly or implicitly involved in any definitions of meaning, including the nouns we might define by pointing. In describing or pointing out examples of, say, a compound fracture we are giving rules for the use of that term. Language is a public institution and the rules for its meaningful use must be publicly available. Even a word like 'pain' which may seem definable only by pointing to some private experience within the breast is none the less governed by publicly understood rules; it *must* be if we are to communicate with each other. At this point it may be objected that I cannot really know what you mean when you use the word 'pain'. To discuss this question is to move from nominal definition to what the tradition calls 'real' or 'essentialist' definition.

'Real' definition

Those who were first concerned with definition were concerned with the nature of things and not mainly of words. For example, Plato's dialogues are typically concerned with establishing a definition of justice in the *Republic*, of courage in the *Laches*, of love in the Symposium, and of knowledge in the Theaetetus. But these definitions are of the things and not of the words. Similarly, Aristotle offers a range of definitions, of motion, happiness, virtue and so on, but again he is concerned with what these things are and not simply with the words. Indeed, Aristotle defines 'definition' as the statement which gives the essence (9), and he is clearly thinking of the essence of the thing or the type of thing, and not mainly, or not at all, of the word. And it is not just the ancient Greeks who take this line on definition, nor indeed is it just philosophers. Linnaeus provided real definitions of plants through his system of botanical classification, and the World Health Organisation (WHO) in 1946 offered a much criticised definition: Health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity. Clearly, the WHO were not offering a definition of the word 'health', but of the very essence of health itself. What is it that Linnaeus and the WHO were trying to do?

Linnaeus was attempting to classify. In the traditional logic the classification is in terms of 'genus' and 'species', where the class that is to be divided is called the 'genus' and the sub-classes are called the 'species'. Classification involves devising a process of dividing such that all the sub-classes are

mutually exclusive. This process of classification employs some technical terms which are widely agreed: they are 'difference', 'property', and 'accident'. A quality is said to be a 'difference' if it serves to distinguish the class of entities of which it is a quality from other species of the same genus, or in other words, if it is used in the definition of the class. A quality is said to be a 'property' if it is a quality possessed by every member of the class, yet is not used to distinguish the class from other species of the same genus. Finally, a quality is said to be an accident if it may indifferently belong or not to all or any members of the class. This terminology may be archaic but the ideas are perfectly familiar and are perhaps expressible as 'defining characteristics' and 'accompanying characteristics'. For example, we might wonder whether certain symptoms are defining characteristics of a disease or just accompanying ones, sometimes or always.

Real definition, as the search for watertight classifications, gives rise to many philosophical problems. Do the types we classify occur naturally in the world -in rebus – or do we impose classifications on the world? A great deal of ink, indeed of blood, was shed in mediaeval times over this and similar problems. And even if there are naturally occurring types in the world they are not always distinctly demarcated but sometimes overlap. Wittgenstein uses the helpful term 'family-resemblance' to make the point that it is not always possible to find the necessary and sufficient conditions which constitute the essential identity of a type of thing. Nature is often fuzzy at the edges of types and our concepts reflect this by being vague or 'open-textured' (to use another helpful expression).

What comes out of this is that the process of real definition in the sense of classification is sometimes arbitrary and depends in the end on stipulation. Closely connected with the idea of real definition as classification is the idea of real definition as scientific analysis. For example, it might be said that Hippocrates could not really define, did not really know, what epilepsy is. From one point of view this is absurd: he discussed the phenomenon. But what he was unable to do was provide a correct scientific analysis of it, whether it is physical or psychological in its causation, or what kind of malady it essentially is.

This account of real definition must be developed if it is to fit the WHO definition of health. We agreed that the WHO definition was not a definition of the word 'health', but neither does it seem to be an attempted classification of health. It seems more like Plato's definition of justice in the Republic: a statement of an ideal. Value words of all kinds are frequently defined in this way. Kant, for example, defines dutiful action as action done not with a motive of inclination or self-interest but out of pure respect for the moral law. He then confesses that there may be no actual cases of purely dutiful action, for the 'dear self' is always turning up in our motivation (10). He must therefore be suggesting an ideal of dutiful action. There may be other processes which can be called 'real definition' but classification, analysis and the search for ideals are common forms of it.

Some problems solved

We are now in a position to deal with some of the questions which we raised at the start.

- 1. Are there indefinables? All words can in some way be defined, but there may be things or experiences which are indefinable. For instance, it is common to say that 'love' cannot be defined. If this means that the word cannot be defined then this is false. But if it means that the experience is not adequately analysable in words then perhaps it is true. Again, it is arguable (although I shall not begin to do so) that some philosophically important concepts are indefinable. For example, we can define the word 'knowledge', but (I assert) there is no non-circular definition (classification or analysis) of what knowledge is. It is of course controversial to try to offer real definitions of value words, such as 'good'.
- 2. Can definitions be true or false? The answer will depend on the sort of definition we are considering. Take first nominal definitions. Reportive or lexical definitions and ostensive definitions will be true or false in so far as they do or do not correctly indicate how a word is in fact used, whereas a stipulation as to how a word is going to be used does not have a truth value. A real definition recommending an ideal has no truth value, whereas real definitions in the form of classifications are more problematic. We may discover at least some real sorts of thing in nature, but there can be more than one way of classifying things.
- 3. Should definitions come at the beginning or the end? The answer here will again depend on the kind of definition we are considering. It can be helpful and saving of confusion if writers make clear at the start how they are proposing to use an ambiguous term – as in the William James example – but at other times a definition can result only from prolonged argument and analysis since what is at stake is what the definition ought to be, and a premature definition may just beg the question for or against a disputed position. A notorious example of this is when a fetus is defined as already having the attributes of a person, leaving the pro-abortionist to defend a murder charge; controversial moral disputes cannot be settled by plucking a definition out of the air.
- 4. Are definitions tautologies? Those who raise such a question may have in their minds definitions such as 'Bachelors are unmarried men', which has the ring of a tautology. This is not the context investigate the difficult and controversial philosophical issues of the tautology, the analytic

proposition, the synonym, or the translation, but at the commonsense level it is plausible to say that word-word definitions are, or approach, the tautologous. But word-thing definitions are not tautologous, nor are real definitions.

Pitfalls and recommendations

- 1. Many contemporary philosophers would be unhappy about retaining the label, 'definition' for what the tradition calls 'real' definition. It is good advice to follow this lead and to use a range of other terms, such as 'classification' or 'analysis' or 'recommendation' for the various processes of real definition. But it should be noted that many writers continue to use the term 'definition' in this wide and perhaps misleading way.
- 2. It is important to distinguish defining characteristics of a type of thing from its accompanying characteristics. The latter may be only typical and not always present. Defining characteristics purport to provide the necessary and sufficient condition of something, whereas accompanying characteristics are simply typically true of something.
- 3. Stipulative definitions can be confusing when, the writer having stipulated a narrow and precise meaning of a word, he then forgets the stipulation and later uses the word in another or in a wider sense.
- 4. Avoid stipulating counter to the normal meaning of a word. For example, the word 'person' in the well known slogan 'respect for persons' is used in a Kantian sense, such that 'persons' are self-determining, self-governing creatures able to run their own lives in terms of rational laws valid for all. It follows from that stipulation that the Down's syndrome child is not fully a person although fully a human being. But such is the emotive force of the word 'persons' that to suggest that a mentally

handicapped child is not fully a person is to run the risk of acrimonious and entirely needless debate over a stipulation which goes against the emotive force of ordinary language.

- 5. Consider whether a definition is always necessary. We can all meet a friend at 8pm for dinner without being able to define time or space, and medical treatment can proceed independently of definitions of disease or health. Indeed, definitions can be undesirable if they foreclose speculation. Experience constantly breaks through the false finalities of language.
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References

- (1) Scadding J G. Health and disease: what can medicine do for philosophy? *Journal of medical ethics* 1988; 14: 118-124.
- (2) Scadding J G. Principles of definition in medicine. *Lancet* 1959; 1: 323–325.
- (3) Scadding J G. Meaning of diagnostic terms in broncho-pulmonary disease. *British medical journal* 1963; 2: 1425–1430.
- (4) Scadding J G. Talking clearly about bronchopulmonary diseases. In: Scadding J G, Cumming G, eds. Scientific foundations of respiratory medicine. London: Heinemann, 1981: ch 2.
- (5) Robinson R. Definition. Oxford: Clarendon Press, 1954.
- (6) Hospers J. An introduction to philosophical analysis. London: Routledge and Kegan Paul, 1956.
- (7) Fulford W K M. Moral theory and medical practice. Cambridge: Cambridge University Press, 1988.
- (8) James W. Essays in pragmatism. New York: Hafner, 1948: 141.
- (9) Aristotle. Topics: bk 1, ch 4.
- (10) Kant I. Groundwork of the metaphysic of morals. Translated by Paton H J. London: Hutchison, 1948: ch 2.